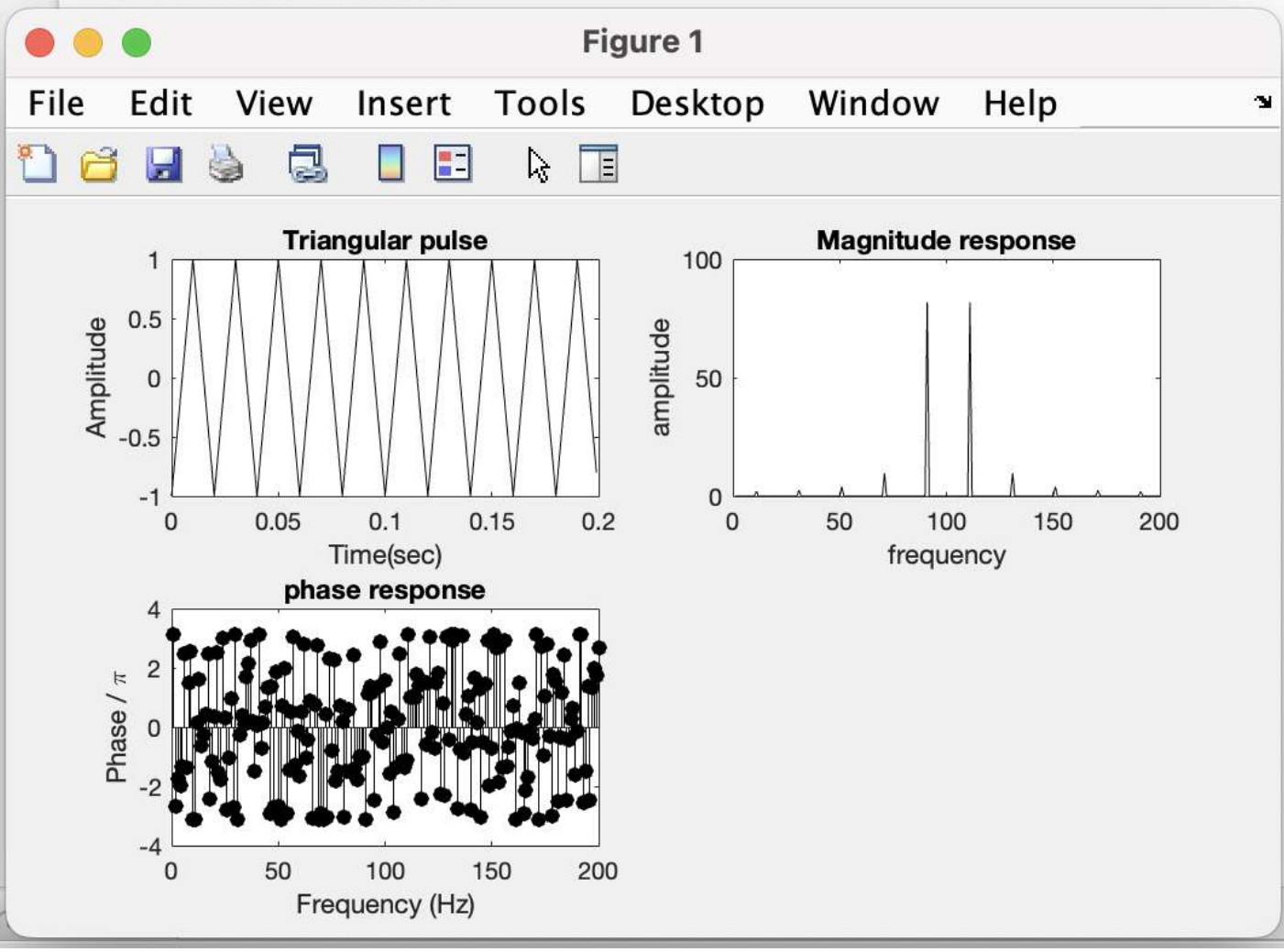
```
T = 10*(1/50);
fs = 1000;
t = 0:1/fs:T-1/fs;
x = sawtooth(2*pi*50*t, 0.5);
subplot(2,2,1); plot(t,x,'black');
xlabel('Time(sec)'); ylabel('Amplitude');
title('Triangular pulse')
y=fft(x);
subplot(2,2,2);
plot(fftshift(abs(y)), 'black');
xlabel('frequency'); ylabel('amplitude'); title('Magnitude response');
theta = angle(y); subplot(2,2,3);
stem(theta, 'filled', 'color', 'black');
xlabel("Frequency (Hz)"); ylabel("Phase / \pi");
title('phase response')
```



Editor - /Users/pavankumarcbanasode/Documents/MATLAB/expt3_b.m

expt3_a.m | expt3_b.m | audio_processing.m | expt4_a.m | +

```
1   clc; clear all; close all;
2   T = 10*(1/50);
3   fs = 1000;
4   t = -5:0.1:5;
5   x = t==0;
6   subplot(2,2,1); plot(t,x,'black');
7   xlabel('Time(sec)'); ylabel('Amplitude');
8   title('Impulse signal')
9   y=fft(x);
10  subplot(2,2,2);
11  plot(fftshift(abs(y)), 'black');
12  xlabel('frequency'); ylabel('amplitude'); title('Magnitude response');
13  theta = angle(y); subplot(2,2,3);
14  stem(theta, 'color', 'black');
15  xlabel("Frequency (Hz)"); ylabel("Phase / \pi");
16  title('phase response')
```